

Docket No. 2001-005-DSK

ABSTRACT OF THE DISCLOSURE

APPARATUS AND METHOD FOR INSTANT COPY OF DATA

5 A system is provided to support dynamically
changeable virtual mapping schemes in a data processing
system. The present invention separates processing of
data unit requirements from the selection of which
storage subsystems to use for storage by using a storage
10 methodologies inventory. A stored data management
subsystem contains one or more hosts. A plurality of
data storage elements is functionally coupled to the one
or more hosts. The plurality of data storage elements is
organized using a plurality of layers of mapping tables.
15 The plurality of layers of mapping tables provides unique
identification of location of the data such that
individual data entries in a mapping table is variable
and self-defining with respect to the amount of data
managed. In addition, the present system provides
20 various instant copy mechanisms for copying data upon
receiving a write operation to either a source or copy
data. The instant copy mechanisms may be selected based
on the type of mapping originally used to store the data
that is to be copied.